April 10, 2001

Brian J. Peters
Mulzer Crushed Stone, Inc.
411 Washington Street
Rockport, Indiana 47635

Re: Permit by Rule,
147-13940-00042

Dear Mr. Peters:

The application from Mulzer Crushed Stone, Inc., received on February 20, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-11, it has been determined that the following grain unloading and loading operations, to be located at 411 Washington Street, Rockport, Indiana, is classified as Permit by Rule under 326 IAC 2-11-3(a)(2) (Permit by Rule for Grain Elevators):

(a) Truck unloading, identified as EU-1, equipped with baffles for PM control, maximum capacity: 20,000 bushels of grain per hour and 600 tons of grain per hour.

(b) Barge loading, identified as EU-2, maximum capacity: 20,000 bushels of grain per hour and 600 tons of grain per hour.

The following conditions shall be applicable:

(a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following:

(1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

(b) Pursuant to 326 IAC 2-11-3(b)(2) (Permit by Rule), the total grain throughput shall be less than eight million (8,000,000) bushels of grain per year.

(c) The source shall comply with the following:

(1) The source shall operate and properly maintain air pollution control devices at the source.

(2) The source shall follow generally accepted industry work practices to minimize emissions of regulated air pollutants.

(3) The source shall not discharge air pollutants so as to create a public nuisance.

(d) Any violation of this rule may result in administrative or judicial enforcement proceedings and penalties under IC 13-30-3.

This Permit by Rule is the first air approval issued for the grain loading operations, and is in addition to the SSOA for the crushed stone processing operations at this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

EAL/MES
cc: File - Spencer County
Spencer County Health Department
Air Compliance - Scott Anslinger
Southwest Regional Office
Permit Tracking - Janet Mobley
Air Programs Section- Michele Boner

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Permit by Rule

Source Background and Description

Source Name:	**Mulzer Crushed Stone, Inc.**
Source Location:	**411 Washington Street, Rockport, Indiana 47635**
County:	**Spencer**
SIC Code:	**5153**
Operation Permit No.:	**147-13940-00042**
Permit Reviewer:	**Edward A. Longenberger**

The Office of Air Quality (OAQ) has reviewed an application from Mulzer Crushed Stone, Inc. relating to the construction and operation of grain loading and unloading operations.

History

The existing source is currently permitted by a Source Specific Operating Agreement (SSOA) for Crushed Stone Processing Plants (147-7710-00042), issued on February 3, 1997. This proposed Permit by Rule will permit the use of existing crushed stone handling equipment for the purposes of unloading grain from trucks and loading grain into barges.

The source will be issued a Permit by Rule under the Grain Elevator category pursuant to 326 IAC 2-11-3 by limiting total annual grain throughput to less than eight million (8,000,000) bushels per year, pursuant to 326 IAC 2-11-3(b)(2).

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

A crushed stone processing operation, having no more than six (6) crushers, thirteen (13) screens, and one (1) conveying operation. (Equipment permitted by SSOA 147-7710-00042)

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The source consists of the following new facilities/units. These units were part of the existing source permitted by the SSOA, but will now be used for the grain loading operations:

(a) Truck unloading, identified as EU-1, equipped with baffles for PM control, maximum

capacity: 20,000 bushels of grain per hour and 600 tons of grain per hour.

(b) Barge loading, identified as EU-2, maximum capacity: 20,000 bushels of grain per hour and 600 tons of grain per hour.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

SSOA 147-7710-00042, issued on February 3, 1997.

The conditions from the SSOA are not applicable to the grain loading operations, but have been retained in the SSOA for the crushed stone processing operations.

Stack Summary

There are no stacks associated with the emission units that comprise the grain loading operations.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on February 20, 2001.

Emission Calculations

See page 1 of 1 of Appendix A of this document for detailed emissions calculations.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

Pursuant to 326 IAC 2-11-3(b)(2), the source shall limit total annual grain throughput to less than eight million (8,000,000) bushels per year.

County Attainment Status

The source is located in Spencer County.

Pollutant	Status
PM_{10}	attainment

SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Spencer County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR Part 52.21.

(b) Spencer County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR Part 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

The source has been issued a SSOA for the crushed stone processing operations, and the grain loading operations are not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than one hundred (100) tons per year,

(b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and

(c) any combination of HAPs is less than twenty-five (25) tons per year.

Federal Rule Applicability

(a) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.300, Subpart DD), Standards of Performance for Grain Elevators. The source has no grain storage capacity, and therefore does not fit the definition of a grain terminal elevator or a grain storage elevator, as defined in 40 CFR 60.301.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability

326 IAC 2-11 (Permit by Rule)

The grain loading operations are subject to the requirements of 326 IAC 2-11 (Permit by Rule) and 326 IAC 2-11-3 (Permit by Rule for Grain Elevators), for a source receiving grain by truck or rail and shipping grain by barge. Pursuant to 326 IAC 2-11-3(b)(2), the source shall limit total annual grain throughput to less than eight million (8,000,000) bushels per year.

Conclusion

The construction and operation of these grain loading and unloading operations shall be subject to the conditions of the attached proposed Permit by Rule 147-13940-00042.

Appendix A: Emission Calculations
Grain Loading Operations

Company Name: Mulzer Crushed Stone, Inc.
Address City IN Zip: 411 Washington Street, Rockport, Indiana 47635
Registration: 147-13940
Plt ID: 147-00042
Reviewer: Edward A. Longenberger
Date: February 20, 2001

Potential to Emit

Process	Throughput (bushels/yr)	Throughput (tons/yr)	Pollutant	Emission Factor (lb/ton)	Potential Emissions (ton/yr)	Control Efficiency (%)	Emissions After Control (ton/yr)	Worst Case Controlled Emission (lb/hr)
Straight Truck Unloading	87,600,000	2,628,000	PM	0.18	237	60.00%	94.6	43.2
			PM-10	0.059	77.5	60.00%	31.0	14.2
Hopper Truck Unloading	87,600,000	2,628,000	PM	0.035	46.0	60.00%	18.4	8.40
			PM-10	0.0078	10.2	60.00%	4.10	1.87
Barge Loading	175,200,000	5,256,000	PM	0.027	71.0	0.00%	71.0	16.2
			PM-10	0.0022	5.78	0.00%	5.78	1.32
				PM Total	**353.5**		**183.96**	
				PM-10 Total	**93.6**		**40.89**	

Potential to Emit with Throughput Limit

Process	Throughput (bushels/yr)	Throughput (tons/yr)	Pollutant	Emission Factor (lb/ton)	Potential Emissions (ton/yr)	Control Efficiency (%)	Emissions After Control (ton/yr)	Worst Case Controlled Emission (lb/hr)
Straight Truck Unloading	4,000,000	120,000	PM	0.18	10.8	60.00%	4.32	43.2
			PM-10	0.059	3.54	60.00%	1.42	14.2
Hopper Truck Unloading	4,000,000	120,000	PM	0.035	2.10	60.00%	0.84	8.40
			PM-10	0.0078	0.468	60.00%	0.19	1.87
Barge Loading	8,000,000	240,000	PM	0.027	3.24	0.00%	3.24	16.2
			PM-10	0.0022	0.264	0.00%	0.26	1.32
				PM Total	**16.1**		**8.40**	
				PM-10 Total	**4.27**		**1.87**	

METHODOLOGY
Throughput limited to 8,000,000 bushels of grain per year.
Emission factors from AP-42 (May 1998) Table 9.9.1-1, Particulate Emission Factors for Grain Elevators
No emission factors are available for barge loading. Railcar loading was conservatively used as a substitute factor.
Throughput (tons/yr) was based on the worst-case density: wheat = 60 lbs/bushel.
Potential Emissions (tons/yr) = throughput (tons/yr) * EF (lbs/ton) / 2000 (lbs/ton)
60% control efficiency due to baffles in the truck unloading hopper.
Emissions after control (ton/yr) = Potential Emissions (ton/yr) * (1-Control Efficiency)
Worst Case Controlled Emission (lb/hr) = Maximum hourly throughput (20,000 bushels/hr) * Worst case density (wheat = 60 lb/bushel) / 2000 (lb/ton) * EF (lb/ton) * (1 - Control Efficiency)